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AGO ltr 29 Apr 1980

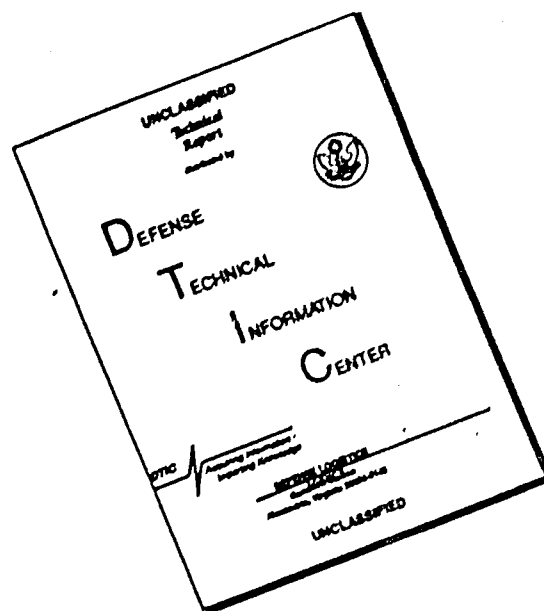
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DEPARTMENT OF THE ARMY  
HEADQUARTERS, 92D ENGINEER BATTALION  
APO SAN FRANCISCO 96491

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AVEGBD-CO

20 November 1971

SUBJECT: Operational Report-Lessons Learned, 92d Engineer Battalion  
(Construction), period ending 31 October 1971, RCS CSFOR-65 (R3)

THRU: Commanding Officer, 159th Engineer Group, ATTN: AVEGB-OP, APO SF 96491  
Commanding General, USARENGRCOMDV, ATTN: AVCC-MO, APO S.F. 96491  
Commanding General, USARV, ATTN: AVHDO-DO, APO San Francisco 96375  
Commander in Chief, USARPAC, ATTN: GPOP-DT, APO San Francisco 96588

TO: Assistant Chief of Staff for Force Development  
Department of the Army  
Washington, D.C. 20310

AD 907854

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*5 MAY 1973*  
*Reputy Chief of Staff for*  
*military operations (Army)*  
*att: DAMO-DOU*  
*Wash, D.C. 20310*

DAFD-DOU  
Inclosure 5  
712062

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SUBJECT: Operational Report-Lessons Learned, 92d Engineer Battalion  
(Construction), period ending 31 October 1971, RCS CEFOR-65 (R3)

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## 2. Lessons Learned:

- a. Personnel: NONE
- b. Intelligence: NONE
- c. Operations:

### (1) Expediting Construction.

(a) Observation: On a recent project which called for the construction of 4 pre-fabricated steel towers it was noticed that the monsoon rains were greatly slowing down construction of poured-in-place concrete footers.

(b) Evaluation: A method of construction was desirable which would eliminate lost time due to heavy rains to allow for timely completion of the project.

(c) Recommendation: Rather than engage troops in the process of constructing form work in excavated holes which quickly filled with water and mud the footers would be precast and trucked to the project site and set in excavations which could be dug minutes before placing the footer with a crane. Time lost due to water soaked foundations and mud damaged form work would be eliminated.

(d) Command Action: The advantages of this system became apparent when it was found in practice that a set of four (4) precast footers could be placed in one working day instead of the two (2) to three (3) days previously required.

### (2) Expediting Construction.

(a) Observation: While engaged in earthwork during the preparation of a storage area at the Vietnam Regional Exchange, Long Binh Post, it readily became apparent that the frequent rain showers were causing soft spots in the pad. Attempts to strip the unsatisfactory soil and replace it with good laterite were often interrupted by showers creating a worse situation than before.

(b) Evaluation: It was obvious that a quick and effective procedure was required to eliminate this problem.

(c) Recommendation: Rather than hauling soil in and stripping off the weak material it was suggested that soil stabilization be tried. The soil would be sacrificed to a depth of 6" to 8" using a MCA/LCC Roto-tiller and adding cement in the quantity of one bag per 9 square feet. The Roto-tiller would then mix the laterite and cement and water would be added where needed to adequately hydrate the cement.

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(d) Command Action: The result was that the laterite-cement hydrate produced a very solid, stable case. It was relatively quick and a very effective operation and as a result the work could be completed and the area sealed with pen-prime before a shower had a chance to develop.

(3) Lifting Large Trusses.

(a) Observation: A recent project called for the erection of prefabricated steel trusses for 4 Pascoe type 120' x 200' buildings, and 4 Butler type 120' x 200' buildings. The problem which arose was how to spread the lifting force over the 120' length of the trusses. Using two (2) cranes each with a spreader bar to give the truss four (4) points of support without having the lifting cables slide together along the member appeared to be the ideal solution except that design of the spreader bar proved difficult.

(b) Evaluation: A spreader bar of proper length and cross section configuration had to be found. A trial and error experimental period was used.

(c) Recommendation: The first spreader bar was fabricated by welding 2 pieces of 4" x 4" angle iron to a piece of 4" pipe 25' long. This proved unacceptable since the bar deflected so much in a lateral direction that permanent deformation of the spreader bar length was decreased to 20'. It also proved unacceptable as the bars were not long enough to keep the truss from deflecting excessively and made control difficult. The final design consisted of cutting a 25' wide flange (18") beam lengthwise along the centerline of the web to form 2 spreader bars. Two lifting eyes were fastened to the web near the ends of the bar and cables run to the crane's hook. Suspender cables were then attached to the bar near its ends to support the truss.

(d) Command Action: This procedure worked so well that it was used throughout the rest of the project and expedited the construction effort greatly.

d. Organization: NONE

e. Training: NONE

f. Logistics:

(1) Lost Time.

(a) Observation: Supply channels and procedures have been very slow in reacting to daily engineer needs. As a result of normal operation, equipment wears out, is damaged, or is even stolen, and as such must be replaced quickly in any case.

(b) Evaluation: Much time is lost searching for items that depot has no record of its being. When the item is located more time is lost due to the procedure involved in procuring the item. Items not locally available must be back ordered resulting in more loss of time.

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(c) Recommendation: Engineer Command should establish a Material Expediting and Liason Team. The team should work in conjunction with the Theater Army Support Command (TASCOM) or equivalent organization such as Deputy Chief of Staff for Logistics (DCSLOG) or the Inventory Control Center (ICCV). Each Group S-4 would provide the team with request for material for which there is an immediate requirement. The team should be able to provide the following services:

(1) Screen all inter-theater depot assets in order to eliminate local shortages.

(2) Submit request for cargo disposition instructions (CDI) for items located at receiving ports.

(3) Provide availability information on suitable substitute items within the theater.

(4) Insure that requisitions for items that are not available in theater are passed to a higher supply echelon such as CONUS.

(5) Provide advanced information on scheduled arrival of material

(d) Command Action: NONE

(2) Operational Stockage List.

(a) Observation: Construction projects are such that they may require large or small amounts of material depending on the project. In many cases no prior warning will be given of an upcoming project.

(b) Evaluation: The Operational Stockage List (OSL) for construction materials has proven to be very effective. Construction items such as nails, electrical hardware, culvert, lumber, cement, etc., make up the OSL. As a result of this on hand stockage, this unit has been able to respond immediately to any construction project.

(c) Recommendation: The OSL should be continued. It should also have items added to it and other dropped from it according to the units mission.

(d) Command Action: It is continued in some materials.

(3) Free Turn-In Point.

(a) Observation: Turn-in of unaccounted for items or excess material continues to be a problem.

(b) Evaluation: Paperwork required to turn-in excess items is often more demanding than the item is worth.

(c) Recommendation: A Free Turn-In Point, requiring no paperwork should be established. Here unaccounted for items, excess material, or found on post items could be turned in and put back into the Army inventory.

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(Construction), period ending 31 October 1971, RCS CSFOR-65 (R3)

(d) Command Action: NONE

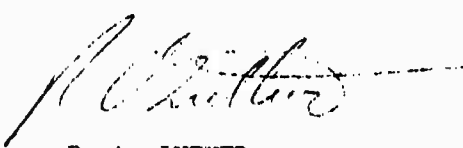
g. Communications: NONE

h. Material: NONE

i. Other: NONE

2 Incl

1. Organization Scheme
2. Station List

  
R. A. LUTHER  
LTC, CE  
Commanding



AVEGB-OP (20 Nov 71) 1st Ind  
SUBJECT: Operational Report-Lessons Learned, 92nd Engineer Battalion  
(Construction), period ending 31 October 1971, RCS CSFOR-65 (R3)

HQ, 159th Engineer Group, APO 96491

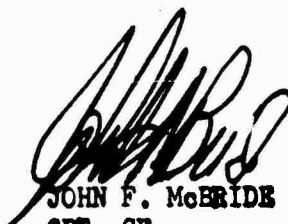
27 NOV 1971

THRU: Commanding General, USARENGRCOMDV, ATTN: AVCC-MO, APO 96491  
Commanding General, USARV, ATTN: AVHDO-DO, APO 96375  
Commander-In-Chief, USARPAC, ATTN: GPOP-DT, APO 96588

TO: Assistant Chief of Staff for Force Development, Department of the  
Army, Washington, D.C. 20310

1. The significant activities and lessons learned have been reviewed and are an adequate reflection of this unit's operations during the period.
2. Reference Lesson Learned, "Lost Time", Section 2, para f (1). Concur with observation and evaluation; however, do not concur with recommendation as the services are already built into the logistics system. No action is recommended.
3. Reference Lesson Learned, "Free Turn-in Point," Section 2, para f (3). Concur. Recommend USARV establish such a free turn-in point where excess and non-accountable items could be turned-in with no paperwork required. The present free turn-in point established by the retrograde procedures requires the same amount of paperwork for a free turn-in as with a normal turn-in.

FOR THE COMMANDER:

  
JOHN F. McERIDE  
CPT, CE  
ASST Adjutant

6  
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AVCC-MO (20 Nov 71) 2nd Ind

SUBJECT: Operational Report - Lessons Learned, 92nd Engineer Battalion  
(Construction), Period Ending 31 October 1971, RCS CSFOR-65 (R3)

HQ, U.S. Army Engineer Command Vietnam, APO San Francisco 96491 11 DEC 1971

TO: Commanding General, U.S. Army Vietnam, ATTN: AVHDO-DO, APO San  
Francisco 96375

1. The significant activities and lessons learned have been reviewed and are an adequate reflection of the unit's operations during this period.
2. Reference item concerning "Expediting Construction", page , para 2c(2). Concur. The cement content appears high, being between 12% and 16% by weight depending upon the actual depth of stabilization. This type soil can be properly stabilized with a cement content of 5% to 7% by weight. No action by USARPAC or DA is recommended.
3. Reference item concerning "Lost Time", page , para 2f(1). Concur. The following command action has been taken. Each Group and Engineer Command has a Material Expediting and Liaison Team. The teams work very closely with DCSLOG and ICCV as recommended. The lost time is primarily centered around the unit notifying the various MRE's and following the established procedures. No action by USARPAC or DA is recommended.
4. Reference item concerning "Operational Stockage List", page , para 2f(2). Nonconcur. Units located at the same location as the supporting depot can requisition the required materials in a minimal amount of time. In some cases where depot does not stock an item, it would be advisable to continue an operational stockage list, but would not include culvert, lumber, and cement. No action by USARPAC or DA is recommended.
5. Reference item concerning "Free Turn-In Point", page , para 2f(3). Nonconcur. In dealing with property the units have the best capability to complete paperwork and update log books as compared to SUPCOM who does not have the personnel necessary to accomplish all the required turn-in procedures. However, the Commander should insure accountability of equipment on Temp and VARP loans and process turn-in of this type of equipment accordingly. No action by USARPAC or DA is recommended.

FOR THE COMMANDER:

  
D.Y. FREED  
CPT, AGC  
Assistant Adjutant General

7

CF:  
92nd Engineer Battalion  
159th Engineer Group

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17 FEB 1972

AVHDO-DO (20 Nov 71) 3d Ind

SUBJECT: Operational Report-Lessons Learned, 92d Engineer Battalion  
(Construction), period ending 31 October 1971, RCS CSFOR-65 (R3)

Headquarters, United States Army Vietnam, APO San Francisco 96375

TO: Commander in Chief, United States Army Pacific, ATTN: GPOP-FD,  
APO 96558

This headquarters has reviewed the Operational Report-Lessons Learned for  
the period ending 31 October 1971 from Headquarters, 92d Engineer Battalion  
and concurs with comments of indorsing headquarters.

FOR THE COMMANDER:



J. L. CHILDRESS

CPT AGC

ADJUTANT GENERAL

Cy furn:  
USARENGR COMDV  
92d Engr Bn

GPOP-FD (20 Nov 71) 4th Ind  
SUBJECT: Operational Report-Lessons Learned, HQ 92d Engineer  
Battalion, (Const), Period Ending 31 October 1971,  
RCS CSFOR-65 (R3)

HQ, US Army, Pacific, APO San Francisco 96558

10 MAR 1972

TO: HQDA (DAFD-ZA) WASH DC 20310

This headquarters concurs in subject report as indorsed.

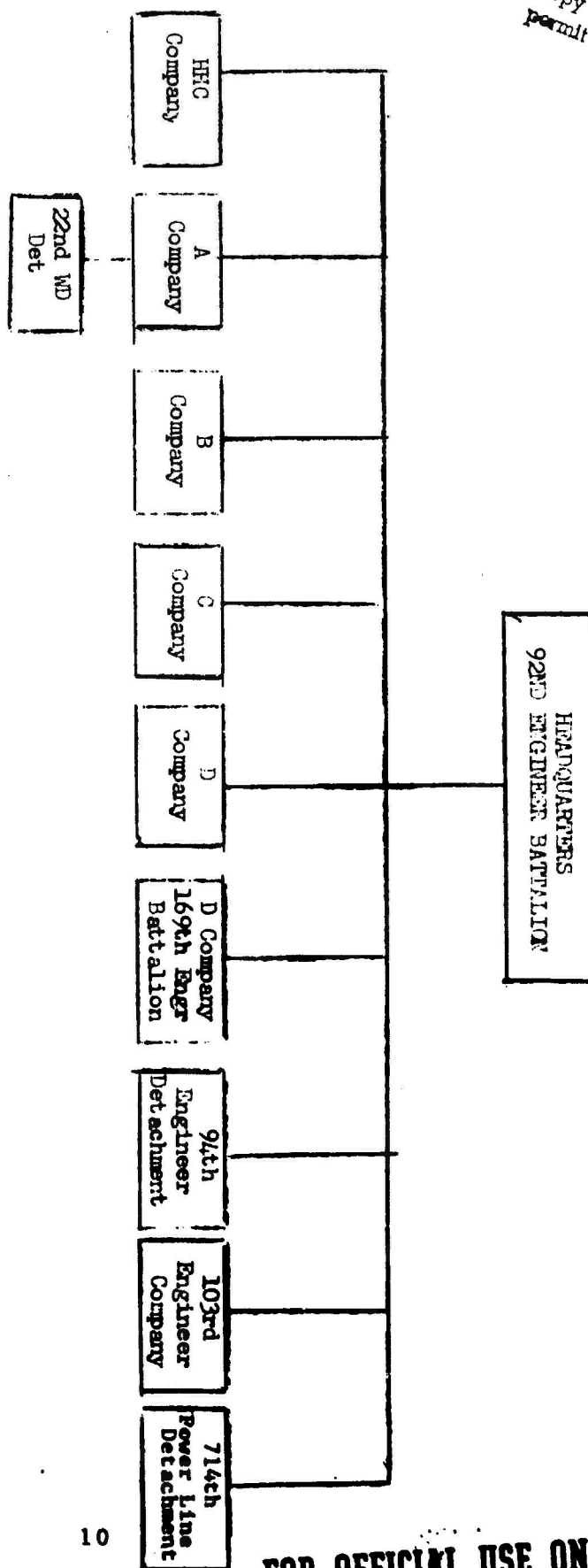
FOR THE COMMANDER IN CHIEF:

2 Incl  
nc

*M. I. Mah*

M. L. MAH  
1LT, AGC  
Asst AG

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### STATION LIST

The following is a list of all subordinate units and detachments of the 92d Engineer Battalion (Construction), Long Binh Post, Republic of Vietnam, APO San Francisco 96491:

1. HHC Company, WBAH-TO, Long Binh Post, YT 06680528, APO San Francisco 96491
2. A Company, WBAH-AO, Long Binh Post, YT 06750540, APO San Francisco 96491
3. B Company, WBAH-BO, Long Binh Post, YT 06680528, APO San Francisco 96491
4. C Company, WBAH-CO, Long Binh Post, YT 05180470, APO San Francisco 96491
5. D Company, WBAH-DO, Long Binh Post, YT 05420420, APO San Francisco 96491
6. D Company, WBAH-DO, Long Binh Post, YT 06780580, 169th Engineer Battalion, APO San Francisco 96491
7. 94th Engineer Detachment (Quarry), WB37-AA, Vung Tau, YS 28604260, APO San Francisco 96291
8. 103rd Engineer Company, WCM5-AA, Nui Lai, YT 06900720, APO San Francisco 96491
9. 22nd Well Drilling Detachment, WDZV-AA, Bao Loc, YT 07707950, APO San Francisco 96491

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4. DESCRIPTIVE NOTES (Type of report and inclusive dates) Experiences of unit engaged in counterinsurgency operations, 31 Oct 71			
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